

LEVEL ONE INSPECTION - CHECK LIST

TO BE PERFORMED BY THE MAINTENANCE OFFICE

THINGS TO LOOK FOR AND MAKE NOTE OF:

Shape

Has the culvert lost its structural shape? YES / NO

If yes, is the CROWN COLLAPSING, SIDES BEING PUSHED IN OR OUT,
BOTTOM HEAVING UP, END OF CULVERT FALLING OFF?

Invert

Concrete - Is the rebar exposed? YES / NO

If yes, what % of rebar in the invert is showing? _____

Is the corrosion severity of the rebar LOW, MEDIUM, HIGH?

Steel - Is the invert rusted? YES / NO

If yes, is the invert INTACT, PERFORATED, GONE?

Plastic - Are there signs of abrasion? YES / NO

If yes, is the invert INTACT, PERFORATED, GONE?

Natural Bottom – Does the culvert have a natural invert? YES / NO

If yes, is the invert STABLE, DEGRADING, AGGRADING?

Joints

Are the joints separating? YES / NO

If so, how many joints are completely separated so that misalignment of the barrels can occur? _____

Have the barrels become misaligned? YES / NO

Seams

Are the seams in a spiral metal culvert showing signs of stress by opening up or otherwise coming apart? YES / NO

If yes, what % of the seams are opening? _____

Where are the open seams? INVERT, SIDE, CROWN?

Head walls

Are there any headwalls? YES / NO

If yes, what are they made of CONCRETE, ROCK, SACKS RIP-RAP?

Coatings

Are there any coatings? YES / NO?

If yes, is the coating INTACT, PARTIALLY GONE, MOSTLY GONE?

Erosion at ends of culvert

Are there any signs of erosion at the inlet or outlet? YES / NO
If yes, is the erosion SLIGHT, MODERATE, or SEVERE?

Piping along barrel

Is there any evidence of water piping along the outside of the barrel? YES / NO
If yes, is the piping SLIGHT, MODERATE, or SEVERE?

Bed load and debris

Is there any bed load or debris in the culvert? YES / NO
If yes, is the amount of bed load and/or debris LIGHT, MODERATE, HEAVY?

Other comments or sketches as you feel are needed:

LEVEL TWO INSPECTION - CHECK LIST

TO BE PERFORMED BY THE HYDRAULICS & WATER QUALITY OFFICE

Date - _____ Inspected By _____

GENERAL INFORMATION

(Provide the following and/or circle all the descriptors below that apply.)

Location – Route _____
MP _____
Offset Right/Left _____
GPS Coordinates _____

Date the culvert was installed - _____

Type – CONCRETE STEEL ALUMINUM PLASTIC (HDPE) OTHER

ROUND BOX SQUASH PIPE MULTI PLATE

BOTTOMLESS ARCH THREE SIDED BOX

Size – Diameter _____
Or
Transverse dimension _____
Vertical dimension _____
Longitudinal dimension _____

Slope of invert or crown _____

STRUCTURAL CONDITION

(Circle all the descriptors below that apply.)

Shape

Has the culvert lost it's structural shape? YES / NO

If yes, is the CROWN COLLAPSING, SIDES BEING PUSHED IN OR OUT,
BOTTOM HEAVING UP, END OF CULVERT FALLING OFF?

Describe the current shape.

Invert

Concrete - Is the rebar exposed? YES / NO

If yes, what % of rebar in the invert is showing? _____

Is the corrosion severity of the rebar LOW, MEDIUM, HIGH?

Describe the extent of exposure and the severity of corrosion.

Steel - Is the invert rusted? YES / NO

If yes, is the invert INTACT, PERFERATED, GONE?

Describe the severity of corrosion.

Plastic - Are there signs of abrasion? YES / NO

If yes, is the invert INTACT, PERFORATED, GONE?

Describe the severity of abrasion.

Natural Bottom – Does the culvert have a natural invert? YES / NO

If yes, is the invert STABLE, DEGRADING, AGGRADING?

If degrading or aggrading describe the severity.

Joints

Are the joints separating? YES / NO

If so, how many joints are completely separated so that misalignment of the barrels can occur? _____

Have the barrels become misaligned? YES / NO

Describe to what extent.

Seams

Are the seams in a spiral metal culvert showing signs of stress by opening up or otherwise coming apart? YES / NO

If yes, what % of the seams are opening? _____

Where are the open seams? INVERT, SIDE, CROWN?

Describe the current condition.

Head walls

Are there any headwalls? YES / NO

If yes, what are they made of CONCRETE, ROCK, SACKS RIP-RAP?

Describe the current condition.

OTHER INFORMATION

(Circle all the descriptors below that apply.)

Coatings

Are there any coatings? YES / NO?

If yes, is the coating COMPLETELY INTACT, PARTIALLY GONE, COMPLETELY GONE?

Describe the current condition.

Erosion at ends of culvert

Are there any signs of erosion at the inlet or outlet? YES / NO

If yes, is the erosion SLIGHT, MODERATE, or SEVERE?

Describe the current condition.

Piping along barrel

Is there any evidence of water piping along the outside of the barrel? YES / NO

If yes, is the piping SLIGHT, MODERATE, or SEVERE?

Describe the current condition.

Bed load and debris

Is there any bed load or debris in the culvert? YES / NO

If yes, is the amount of debris LIGHT, MODERATE, HEAVY?

Describe the current condition.

HYDRAULIC CAPACITY

Describe how the sub-basin is changing with respect to land use and how the changes might effect the hydraulic capacity of the culvert.

FISH PASS-ABILITY

Does this culvert need to be fish passable? YES / NO

If yes, provide the following information.

Existing slope of the culvert (from above). _____

Depth of flow. _____

Weather for the past week.

Describe - _____

Bed load and debris in the culvert (from above).

Describe - _____

Upstream characteristics

Describe - _____

Downstream characteristics

Describe - _____

OHWL width upstream and down stream

Describe - _____

Any blockages that can be seen either up or down stream of culvert.

Describe - _____

HIGHWAY INFORMATION

Current ADT of highway is _____.

What detours are possible?

PHOTOGRAPHS

Upstream conditions
Inlet
Interior
Outlet
Downstream conditions

OTHER COMMENTS AND/OR SKETCHES

Provide any other comments and/or sketches necessary to fully describe any of the items above, or any other items the inspector deems appropriate.